January 17, 1962

Dr. Luther Terry
Surgeon General of the United States
U. S. Public Health Service
Department of Health, Education and Welfare
Washington 25, D. C.

Dear Dr. Terry:

On August 24, 1960, The United States Public Health Service Committee on Live Poliovirus Vaccine made the following statement in its report to the Surgeon General:

"The Committee considers that of the strains available for perparing live oral poliovirus vaccine, the Sabin Type I and Type II strains possess the most favorable laboratory and field characteristics and recommends their use. The Committee also recommends the use of Sabin Type III strain which is satisfactory from the point of view of neurovirulence although it has less than optimum immunogenic capacity and shows a tendency to change its neurovirulence characteristics after passage in man. The committee urges the continued search for a superior Type III strain. Cell candidate strains other than those of Sabin which have been studied extensively are of greater neurovirulence for monkeys than the selected reference." (A lot of Sabin Type I attenuated virus was chosen as a reference strain by the Committee.)

The Committee's statement was followed by a public announcement by the Surgeon General endorsing Sabin's strains at the exclusion of other available attenuated strains. My objection to the decision was based on

the fact that available laboratory data were insufficient to warrant the unorthodox procedure of declaring superiority of one group of strains over another by an official government body. I had no objection to the choice of the reference strain, but I was concerned that the Committee's decision would lead to government fostering of exclusive manufacture of Sabin's products by all Pharmaceutical Companies interested in production of live polio vaccine. This, indeed, occurred.

My protest to the Surgeon General was referred back to the Committee on live Virus Vaccine and on October 18, 1960, I wrote to Doctor Roderick Murray requesting that he call a meeting so that my colleagues and I could discuss the problems with the Committee. Dr. Murray replied to my letter on October 30 indicating that he had reservations about holding a meeting with my colleagues. I repeated my request on November 4 and December 8, but received no reply.

In the meantime, more extensive investigations conducted during 1960 and 1961 by manufacturers and independent scientists revealed several new facts related to the Sabin's attenuated polio strains. Originally, the Committee felt the neurovirulence for monkeys was the most important laboratory criterion available and that the Sabin strains showed less neurovirulence than the other strains. It has been demonstrated that the Sabin strains give variable results with regard to neuropathogenicity in monkeys, and, that in fact, several lots of Type I and Type III vaccines handled by the same or by different laboratories were much more virulent for monkeys than the reference virus.

This factor alone should have invalidated the criterion chosen by the Committee on August 24, 1960, to exclude strains other than Sabin's

as "of greater neurovirulence for monkeys than the selected reference".

However, even more urgent is the problem of Sabin's Type III virus which was proved to be notoriously unstable after a single passage through the human intestinal tract. Work conducted at The Wistar Institute led to the development of a new attenuated Type III strain which was derived directly from the original W-Fox Type III strain used for successful vaccination of 7 1/2 million people.

This new WM-3 strain of Type III virus does not change after passage through human intestinal tract and is obviously superior to the existing Type III strains including Sabin Type III which was endorsed with reservation by the Committee in 1960.

On April 14, 1961, I wrote to Dr. Murray telling him of our success with production of poliovirus vaccine in human diploid cell strains and of our development of a new genetically stable type 3 strain. In view of the fact that On August 24, 1960, the Committee urged "the continued search for a superior Type III strain", I expected that this information would elicit a response. Nevertheless, the letter remained unanswered.

Finally on May 23, 1961, I made another plea to be heard. This resulted in a meeting held at DBS on June 23, 1961. The full Committee, my associate, Dr. Stanley A. Plotkin, and I participated. At that meeting I discussed the success of mass immunization of 8 million people with my Type I strain and told of the development of an attenuated Type III (WM-3) which does not change after passage through the human intestinal tract.

Although the Committee appeared interested in the data which I presented, it was still quite obvious to me that it would be impossible for any manufacturer to display interest in the production of a new Type III

vaccine with characteristics superior to those presently available until the original, exclusive endorsement of Sabin's strains would be publicly amended. Therefore, on July 12, 1961, I wrote to Dr. Murray and the Committee members and referred to the need for definite and public steps to alter the official position on the acceptability of only one group (Sabin) of strains for vaccine production. In response to this letter, a Committee member wrote to Dr. Murray stating: "Any strain, ..., should be approved, if data are presented and confirmed to show that the strain possesses properties of a vaccine virus which are equal, or superior, to those of the Sabin Type I LSc reference strain. I would have hoped this is clear to everyone interested, but if it is not, then you should consider a public statement to this effect."

Unfortunately, no public statement has been forthcoming. In fact, I never even received a reply to my letter of July 12.

I feel that it is imperative that the paragraph of the Committee report referred to at the beginning of this letter be withdrawn and that a new public statement be made. This statement, based on facts made available in print and to the Committee, should make it clear that the strains which I developed could be licensed if they met the criteria established for the reference strain. Thus, the problem of exclusive licensing and manufacturing fostered by the obviously unwarranted statement of August 24, 1960, would be eliminated, permitting organizations to work with my strains.

I trust that you will give this matter your serious consideration and that a public statement will be forthcoming.

Sincerely yours,

Hilary Koprowski, M. D.,
Director